

# POSTFIRE RESERVOIR SEDIMENT REMOVAL

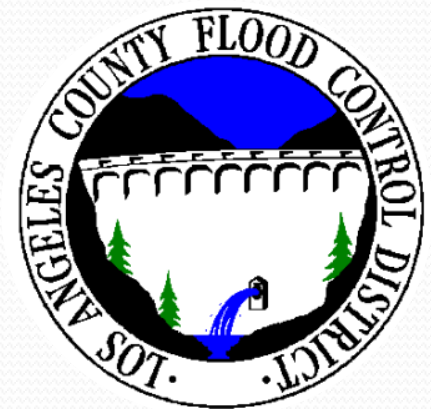


Presented by Ken Zimmer, PE  
Los Angeles County  
Department of Public Works

# Flood Control District

Owens and operates complex flood protection and water conservation systems that includes:

- 14 major dams
- 155 debris basins
- 500 miles of open channels
- 20 sediment placement sites



# 2009 Station Fire

160,000 Acres Burned

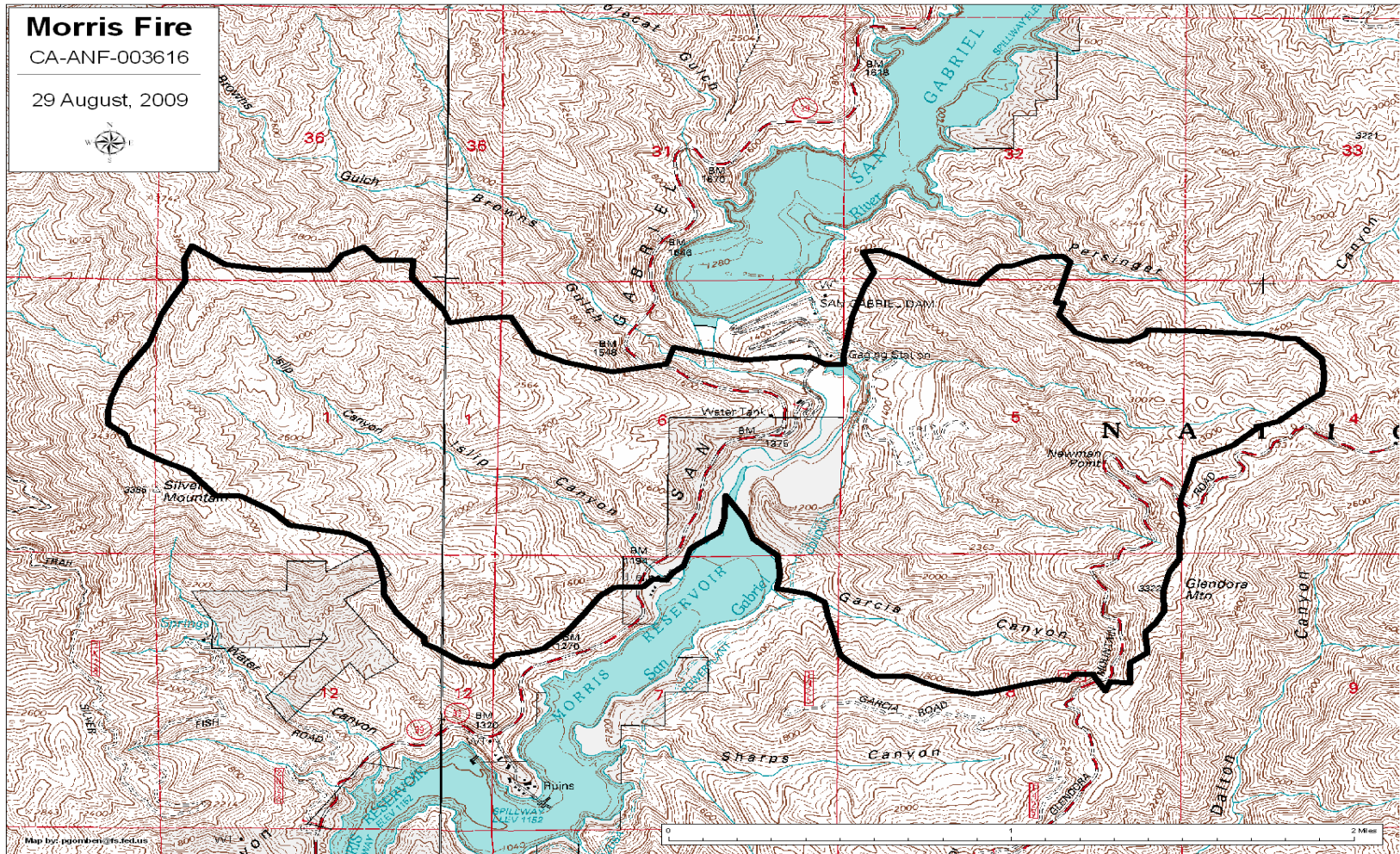


Source: Scientific American



# 2009 Morris Fire

2,000 Acres Burned



# Design Debris Event (DDE)

- Sediment Produced
- Completely Burned Watershed
- 50 Year Storm (2% any given year)
- Can happen multiple times

# Flood Control District Concerns

- Maintain Flood Control
  - Protect the outlet valves
  - Adequate capacity for Flood and Debris Control
  - Water Conservation Storage

# Regulating Agencies



California Department of Fish and Game



Los Angeles Regional Water Quality Control Board

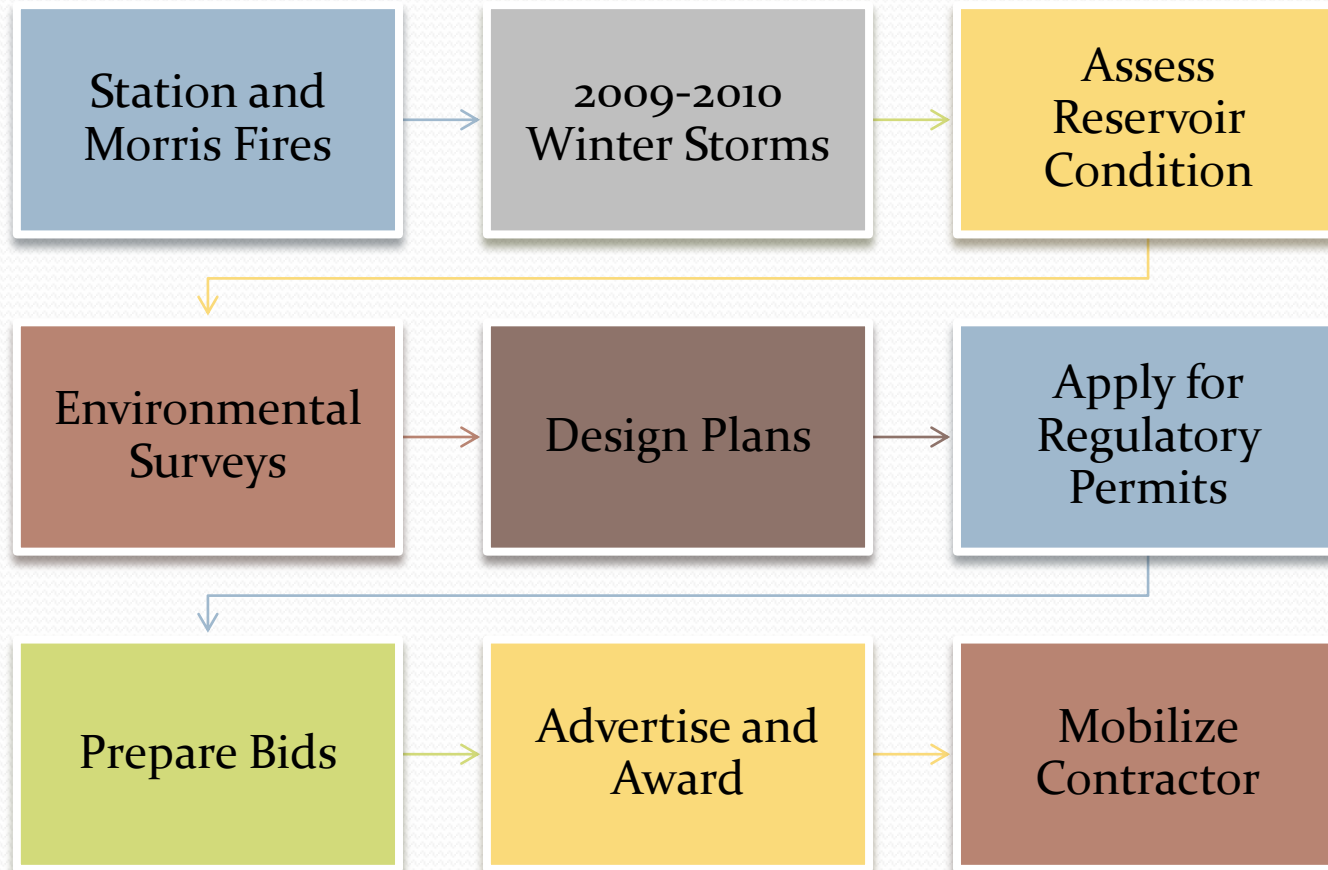


United States Army Corps of Engineers



United States Forest Service

# General Project Timeline

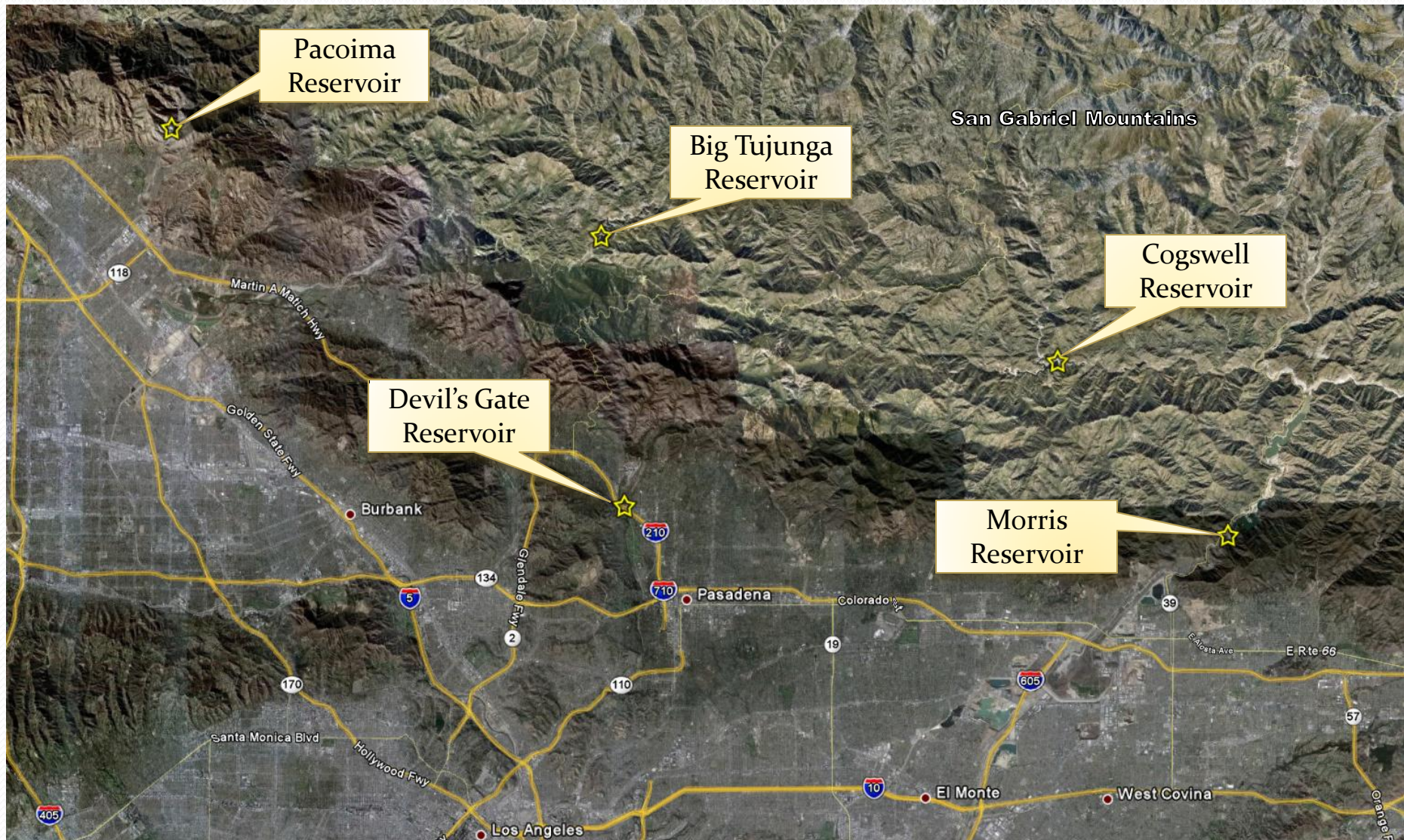






# Reservoir Sediment Removal Projects

# Reservoir Location Map





# Devil's Gate Reservoir

## Effect of Station Fire

The Station Fire burned 68% of the watershed



Photo Taken February 2011

# Devil's Gate Reservoir

## CEQA - EIR

On March 1, 2011 the Los Angeles County Board of Supervisors approved a motion to move forward with a full Environmental Impact Report (EIR).

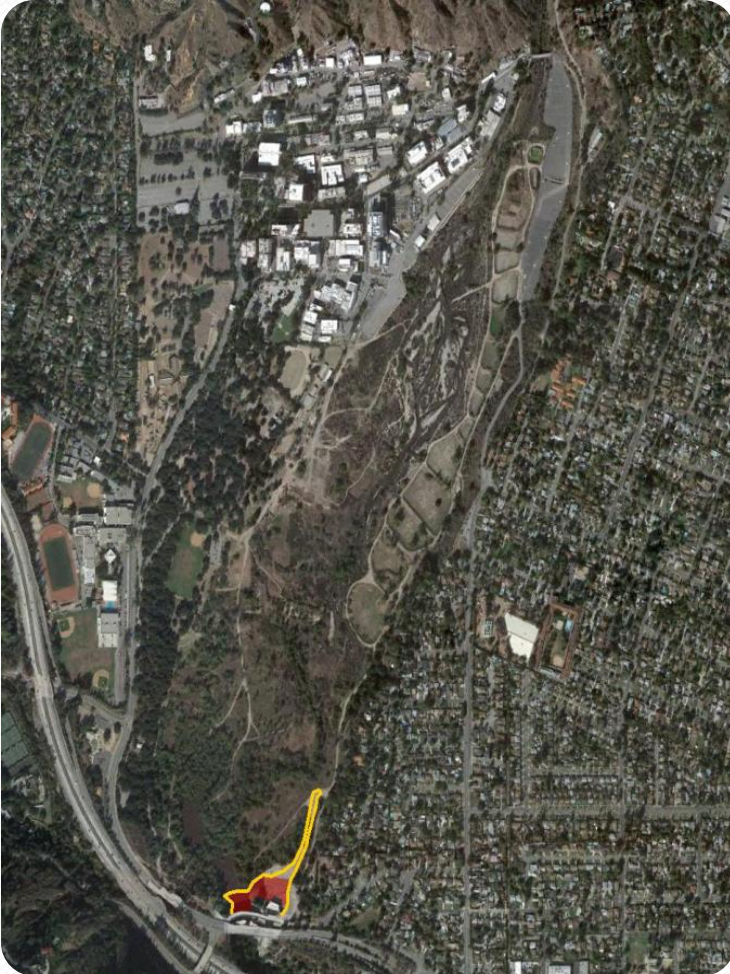
EIR Process
Project Initiation Issue Notice of Preparation (NOP)
Scoping Meetings
Draft EIR available for review Issue Notice of Availability (NOA)
Public Review (45 Days)
Final EIR certified Issue Notice of Determination (NOD)
Acquire Project Permits
Begin Construction



# Devil's Gate Reservoir

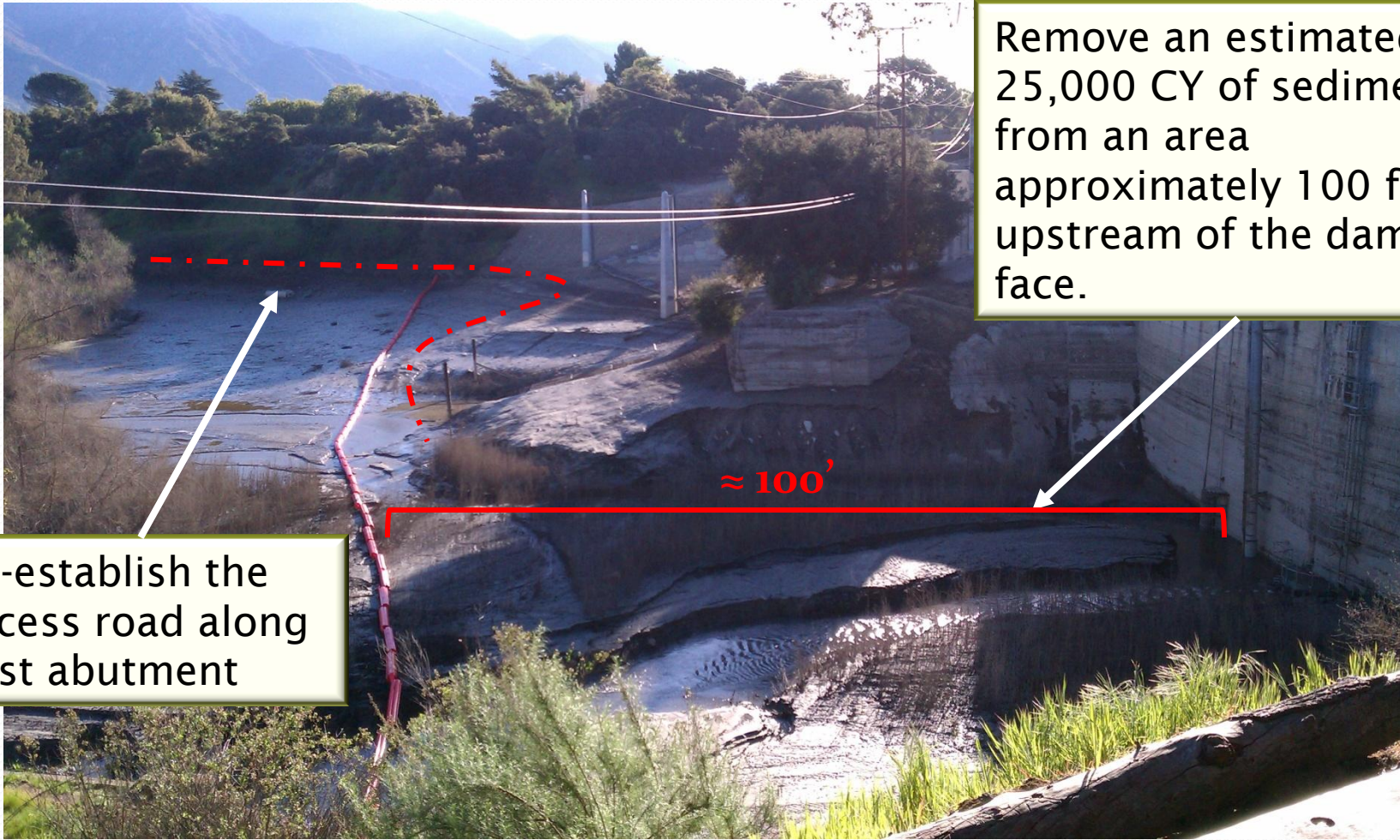
## Interim Operational Measures

Limits of work





# Interim Operational Measures



Remove an estimated 25,000 CY of sediment from an area approximately 100 feet upstream of the dam face.

Re-establish the access road along east abutment

≈ 100'

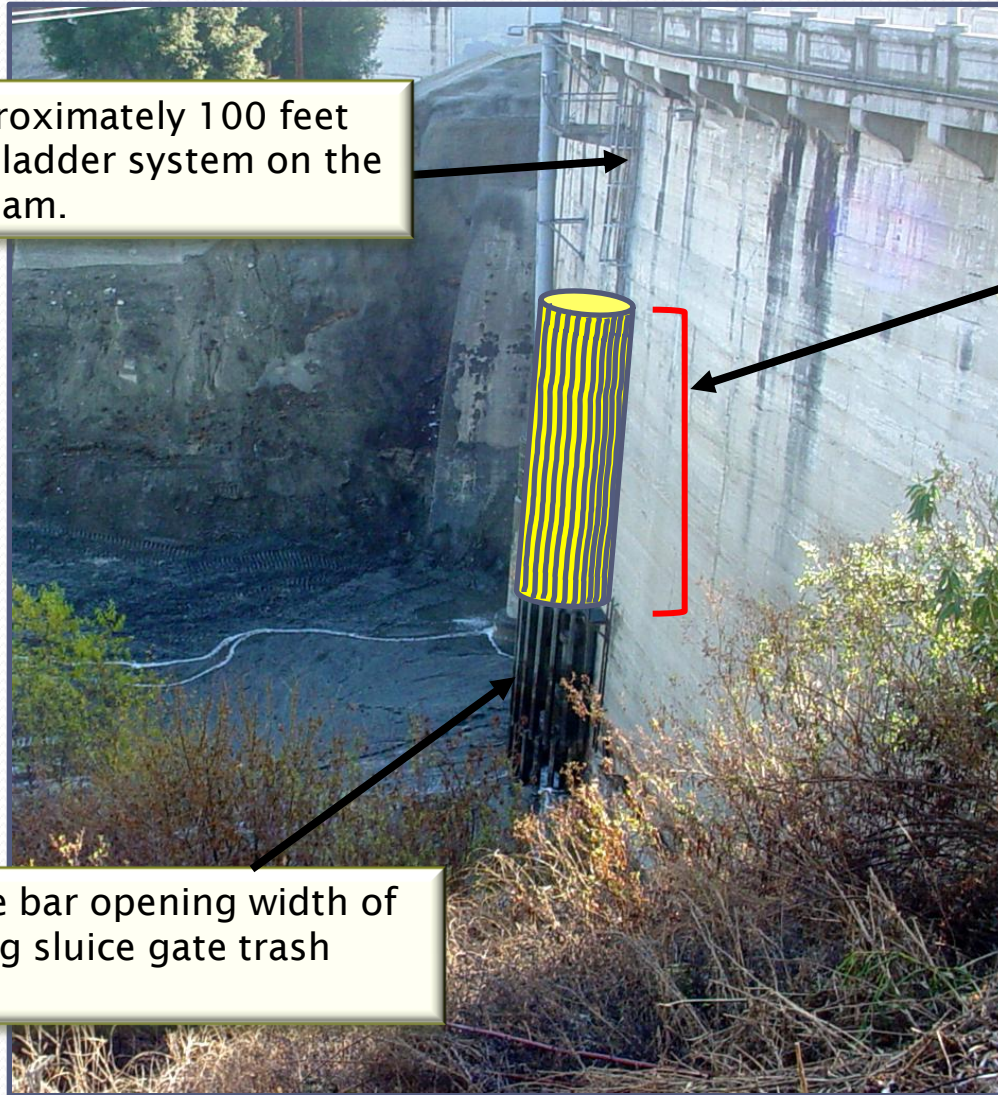


# Interim Operational Measures

Replace approximately 100 feet of damaged ladder system on the face of the dam.

Extend the height of existing sluice gate trash rack approximately 32 feet.

Reduce the bar opening width of the existing sluice gate trash rack.



# Cogswell Reservoir

## Effect of Station Fire

The Station Fire burned 90% of the watershed

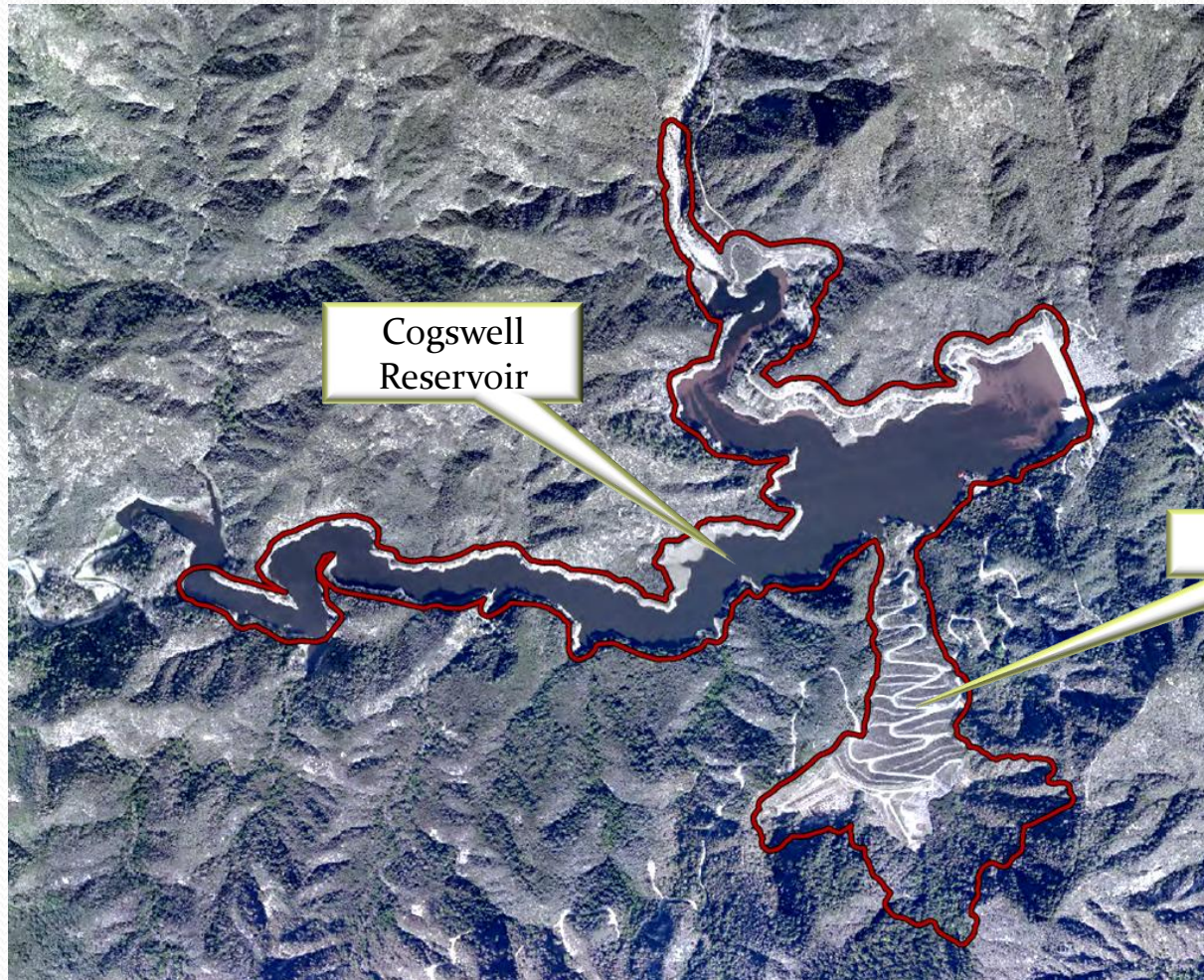


Photo Taken March 2010



# Cogswell Reservoir

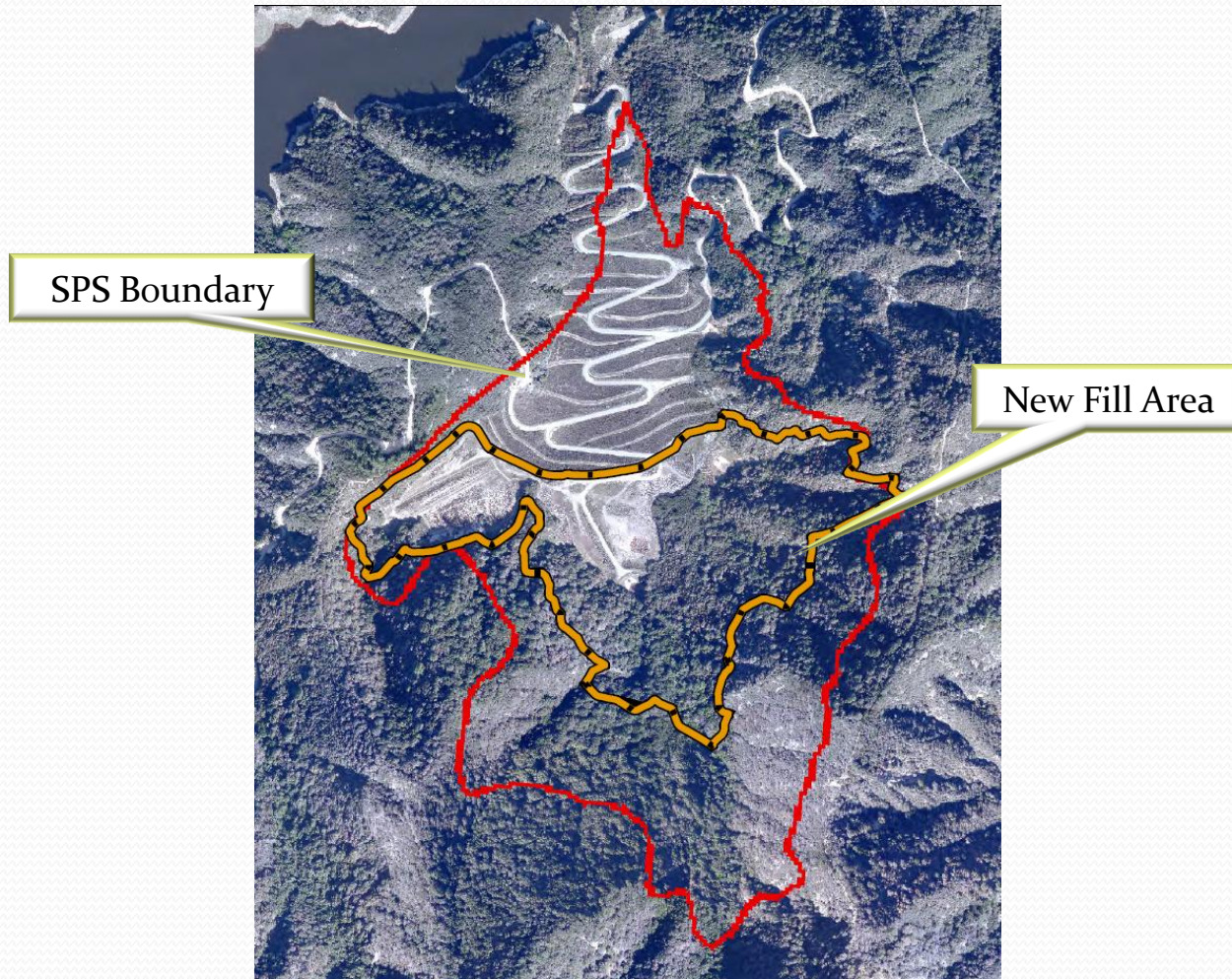
## Project Overview





# Cogswell Reservoir

## Cogswell Sediment Placement Site





# Pacoima Reservoir

## Effect of Recent Fires

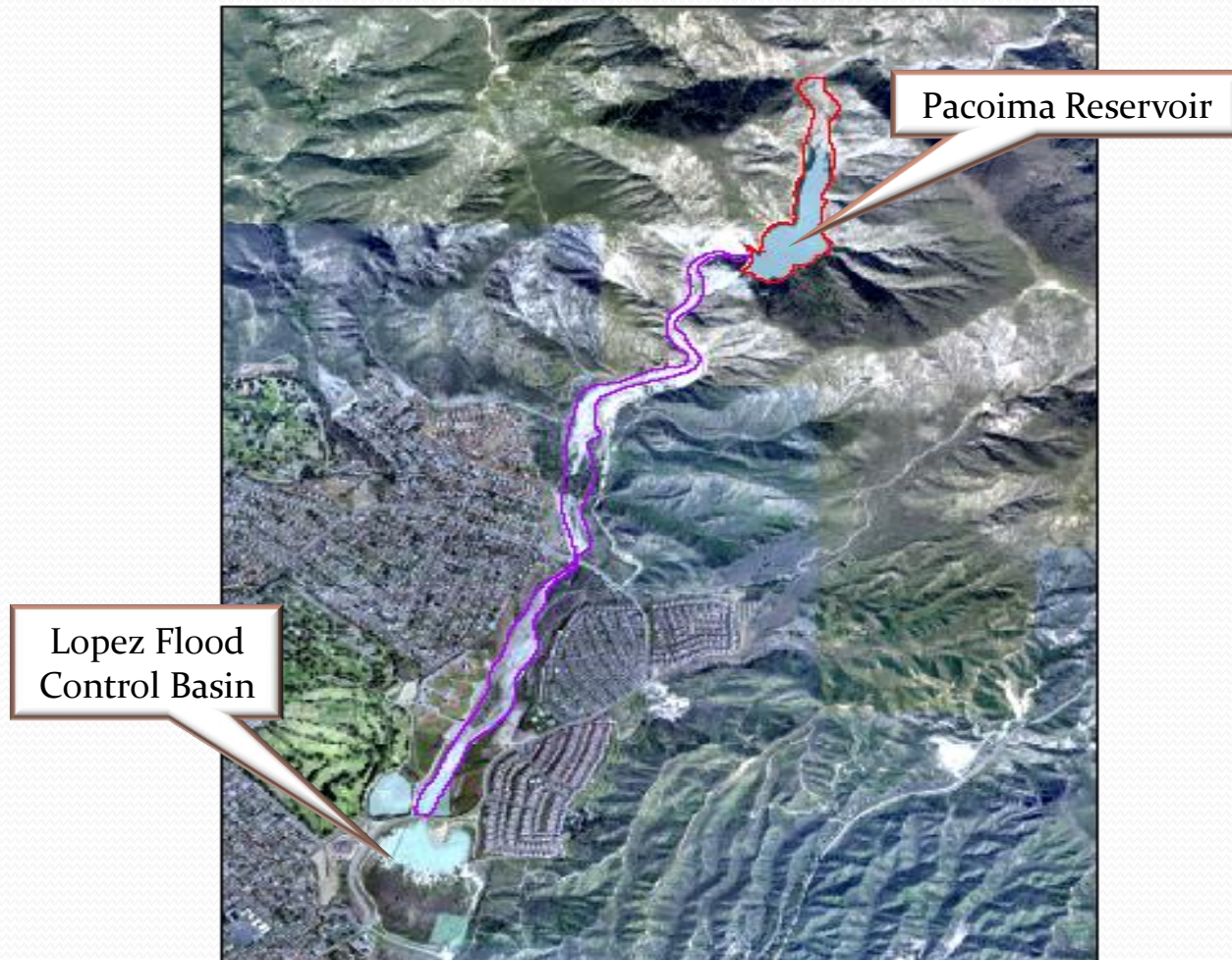
The Marek (2008), Sayre (2008) and Station Fires (2009) burned 76% of the watershed



Aerial View of Pacoima Dam and Reservoir

# Pacoima Reservoir

## Project Overview





# Big Tujunga Reservoir

## Effect of Station Fire

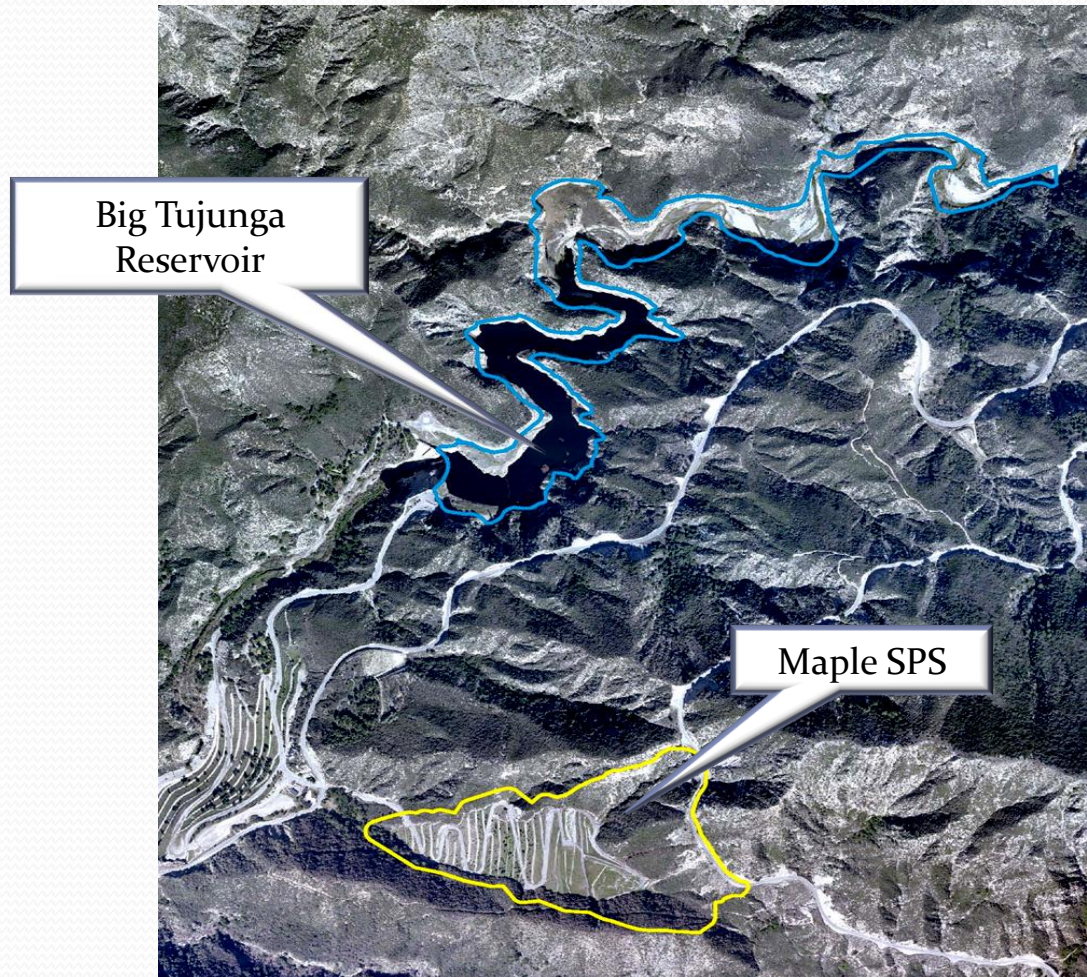
The Station Fire burned 87% of the watershed



Photo Taken After Station Fire

# Big Tujunga Reservoir

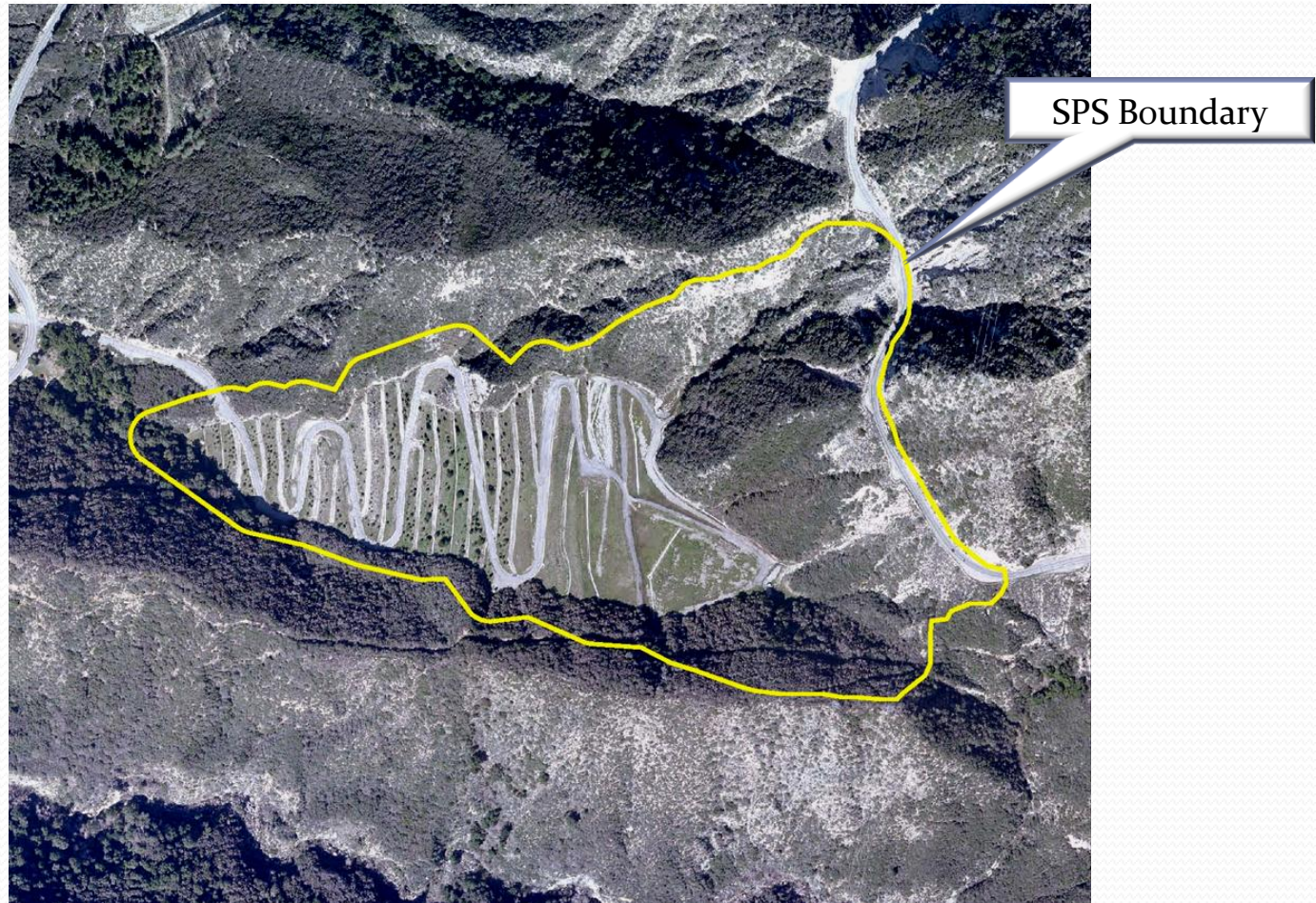
## Project Overview





# Big Tujunga Reservoir

## Maple Canyon Sediment Placement Site





# Morris Reservoir

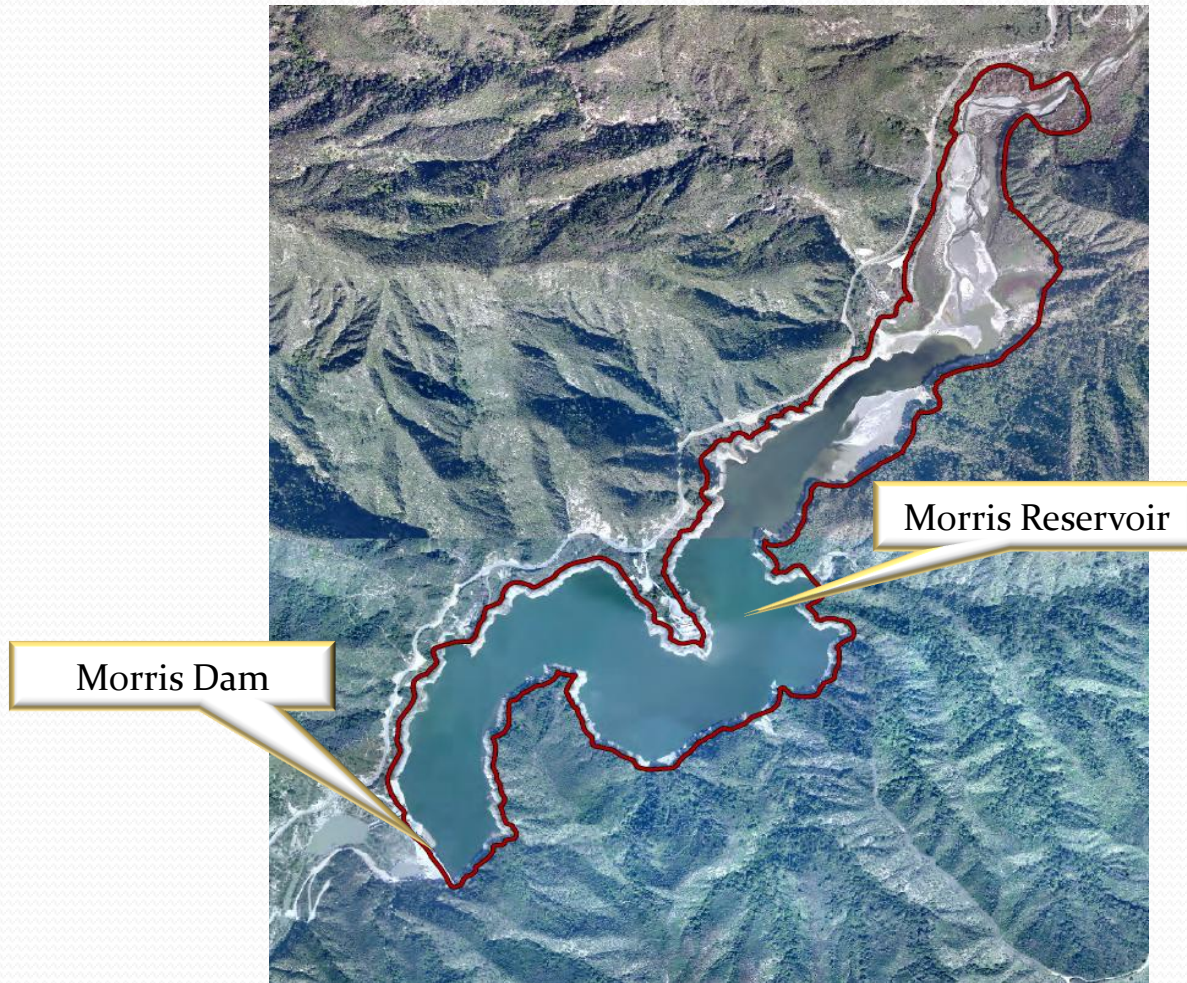
## Effect of Morris Fire

The Morris Fire burned 35% of the watershed



# Morris Reservoir

## Project Overview





# Morris Reservoir

## San Gabriel River and Santa Fe Flood Control Basin





# Summary

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For more information, go to  
<http://dpw.lacounty.gov/wrd/Removal/index.cfm>

Email questions to:  
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